

programs reflect the combined effects of several factors, only some of which can be expected to continue. First, there is typically a rush by some young persons to become licensed just before GDL takes place and these individuals generally are more risky drivers than those who are content to wait and make their way through a GDL system. There is likely some effect of that phenomenon in the results presented above. Secondly, during the initial years of GDL there is a reduction in various kinds of driving exposure – compared to pre-GDL driving – which results in fewer crashes. Young drivers may drive less, fewer may be driving at all, many more are driving under safer conditions (e.g., with parents, only during daylight hours or both). As this temporary phenomenon works its way through the young driving population, the enduring benefits of GDL become more apparent. In New Zealand, for example, although teen driver crashes initially declined by more than 20%, the long-term benefit of GDL was a sustained decrease of 7 - 8% in crash-related injuries among teen drivers.⁶ Another indication of the likely long-term effect of GDL comes from Florida. The Florida GDL system was implemented in separate pieces rather than as a comprehensive system. As a result of that approach, there was no ‘roll-in’ or period during which a combination of factors affected the young driver population. A recent examination of the effect of these changes found a decline of 9% in fatal and injury crashes among 15 - 17 year-old drivers.⁷

During 2000, effects of the GDL program should be manifest more clearly among 17 year-old drivers as that cohort is increasingly composed of drivers who experienced the GDL program. Following that, as GDL becomes the status quo, rather than a new approach to licensing, there will likely be a moderation of some of the initial effects of the program. Still, it appears prudent to expect perhaps a 10% overall decline in young driver crashes as a result of the North Carolina GDL system.

Despite the likelihood that in future years, the benefit of GDL will not continue to be so large as in the first year, the results are highly encouraging. Moreover, the lives saved and injuries prevented during 1999 alone are dramatic. Even should the effect of GDL disappear entirely in the next year or two, which it clearly will not, the one-time benefit would amount to dozens of lives saved, thousands of injuries prevented and millions of dollars saved as a result of a single year of dramatically reduced crashes. The UNC Highway Safety Research Center is continuing to examine the effects of the North Carolina GDL program to determine the long-term effect and also to learn the extent to which those effects are due to reductions in high-risk exposure, and what proportion is due to increased driving skills. Moreover, we will look at the extent to which the GDL program results in safer driving among older drivers, who began their driving experience under the GDL program compared to those who learned under the previous system.

⁶ Langley JD, Wagenaar AC, and Begg DJ. An evaluation of the New Zealand graduated driver licensing system. *Accident Analysis and Prevention*. 1996; 28(2):139-46.

⁷ Ulmer RG, Preusser DF, Williams AF, Ferguson SA, Farmer CM. Effect of Florida's Graduated Licensing Program on the Crashes of Teenage Drivers. *Accident Analysis and Prevention*. 2000; 32(4):527-532.